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IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

MARTEK BIOSCIENCES CORP. Plaintiff, v. NUTRINOVA INC. and NUTRINOVA NUTRITION SPECIALITIES and FOOD INGREDIENTS GmbH, Defendants.	)	Civil Action No. 03-896

ANSWERING BRIEF BY DEFENDANTS TO PLAINTIFF'S MOTIONS TO STRIKE DEFENSE AND TO DISMISS COUNTERCLAIMS

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Attorneys for Defendants Nutrinova Inc. And Nutrinova Nutrition Specialities and Food Ingredients GmbH

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STATUTES AND RULES

I. INTRODUCTION

This is the answering brief of Defendants Nutrinova Inc. and Nutrinova Nutrition Specialties and Food Ingredients GmbH (collectively "Nutrinova"), in response to Plaintiff Martek Biosciences Corp.'s ("Martek") Motion and brief to dismiss Nutrinova's inequitable conduct affirmative defense and declaratory judgment counterclaim.

II. SUMMARY OF ARGUMENT

1. Nutrinova sufficiently pled inequitable conduct under Fed. R. Civ. P. Rule 9(b). Nutrinova's pleading specifically identifies Martek's misconduct – that Martek knowingly included false data in its patent application. Filing false data in a patent application is a basis for finding inequitable conduct. Further, concurrently with the filing of its Answer and Counterclaims, Nutrinova sent Martek a private letter further detailing that defense. (The relevant portions of which are attached as Exhibit 1). Martek errs in demanding a pleading which would include the detail of a brief or an interrogatory answer.

2. Nutrinova's declaratory judgment Count III counterclaim is proper and justiciable. Nutrinova makes only one relevant product, called DHActive™, by only one process. Martek had previously asserted multiple patents against DHActive, and has now sued alleging that DHActive infringes two patents. The declaratory judgment counterclaim seeks closure only for that same one product which is already in this case.

Martek's Motion ignores completely that Martek has already sued Nutrinova, which entirely distinguishes the cases that it has cited. Having already filed a patent infringement action against DHActive, Martek has created in Nutrinova an obvious objectively reasonable apprehension of other lawsuits against that one product under other patents. Given that Nutrinova has only one product made by one process, it is appropriate to require Martek to either

assert any other patents that it may have against it or agree that none of its other patens are infringed. Martek does not have a Constitutional right to sue Nutrinova on a product, and, after losing on those first patents, later sue on other patents against the same product. Both the Court and Nutrinova deserve peace and should not retry multiple suits involving a single technology.

III. STATEMENT OF FACTS

A. DHA

The case involves Martek's patents relating to the omega-3 fatty acid DHA (docosahexaenoic acid). DHA is a major and essential structural fatty acid which is necessary for the development of organs such as the eye retina, brain and the heart. Thus, inclusion of plentiful DHA in the diet improves learning ability, whereas deficiencies of DHA are associated with deficits. Similarly, the visual acuity of healthy, full-term, formula-fed infants is increased when their formula includes DHA. DHA also reduces triglycerides in the blood and decreases thrombosis, and it also prevents cardiac arrhythmias. Unfortunately, the human body produces DHA only in limited quantities. Because of its benefits, medical science is now encouraging greater consumption of DHA in the diet, particularly as part of infant formulas and as a food supplement for those persons who do not tend to eat much fatty fresh seafood or organ meats, the natural source of DHA.

Martek neither invented DHA, nor discovered its health benefits. It did not even discover how to culture or farm microalgae to produce DHA, because science has also long known that DHA can be isolated from specific species of "farmed" microalgae. Both Martek and Nutrinova are building on that prior art knowledge. At most, Martek can only claim to have potentially identified processes to incrementally increase the DHA production.

Martek is a current supplier of "farmed" microalgae DHA, but Martek supplies mainly infant formulas, and does not have the capacity to supply all DHA requirements. Nutrinova has developed its own microalgae process to make DHA, and has started marketing its product called DHActive.

B. Martek's Threats Against Nutrinova and Filing of this Lawsuit

When Nutrinova commercialized its DHActive, Martek threatened Nutrinova, citing only its generic patent portfolio and without identifying any specific patents. Martek wrote to Nutrinova:

> We [Martek] have been monitoring the market situation and, based on claims contained in prior and recently issued patents, remain very concerned about the possibility of Nutrinova's commercialization of DHActive . . . .

(Exhibit 2). Nutrinova wrote back asking which patents Martek was asserting against Nutrinova's DHActive. (Exhibit 3). On June 18, 2003, Martek then responded:

> We continue to be concerned about how it is possible to produce a DHA-rich oil with a composition similar to that reported for DHActive without infringing on one or more claims in Martek's patent portfolio. . . . . However, in the absence of any additional information which would persuade us to act otherwise, Martek may have no alternative but to actively assert its patent rights. As requested, we are providing you with a list of patents that we believe are relevant to this discussion. Of Martek's over 150 issued patents (and over 250 pending applications), we have selected 18 relevant Martek issued US patents (list attached). Of course, your product and process may also infringe other Martek patents.

(Exhibit 4). The e-mail communication contained a list of 18 Martek U.S. patents. (Id.).

Nutrinova responded, and sought a meeting with Martek to discuss the situation, and explain why Martek's patent were either not infringed or were invalid. Nutrinova offered to come to Martek's headquarters for the meetings at a time convenient to Martek. (Exhibit 5).

Martek never accepted Nutrinova's offer to discuss the situation, but, instead, filed this

lawsuit on September 23, 2003 (although Martek did not advise Nutrinova or attempt to serve its Complaint until October 15, 2003). In the meantime, as pleaded in ¶ 42 of Nutrinova's counterclaim, Martek has told third-parties that Nutrinova's DHActive infringes Martek's patent portfolio, in order to prevent third-parties from working with Nutrinova.

In its current Complaint, Martek asserts only two patents.[1] One of the two asserted patents was included on the list of 18 patents with which Martek had threatened Nutrinova on June 18, 2003. The second patent in suit is in addition to the list of 18 patents previously asserted. The other unasserted patents are heavily inter-related with the two asserted patents. For example, the asserted 567 patent is the result of multiple continuing patent applications that resulted in several earlier patents.[2] Martek has not yet included these earlier patents in the

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[1] U.S. Patent No. 6,451,567 ("the '567 patent") and U.S. Patent No. 6,607,900 ("the '900 patent").

[2] The following is the prosecution history that Martek set out at the beginning of its Patent 6,451,567 (with earlier issued patents highlighted):

> This application is continuation-in-part of U.S. patent application Ser. No. 08/968,628, filed Nov. 12, 1997, now abandoned, which is a continuation of U.S. patent application Ser. No. 08/461,137, filed Jun. 5, 1995, which issued as U.S. Pat. No. 5,688,500, which is a continuation of U.S. patent application Ser. No. 08/292,490, filed Aug. 18, 1994, which issued as U.S. Pat. No. 5,518,918, which is a divisional of U.S. patent application Ser. No. 07/962,522, filed Oct. 16, 1992, which issued as U.S. Pat. No. 5,340,742, which is a continuation-in-part of U.S. patent application Ser. No. 07/911,760, filed Jul. 10, 1992, which issued as U.S. Pat. No. 5,340,594, which is a divisional of U.S. patent application Ser. No. 07/580,778, filed Sep. 11, 1990, which issued as U.S. Pat. No. 5,130,242, which is a continuation-in-part of U.S. patent application Ser. No. 07/439,093, filed Nov. 17, 1989, now abandoned, which is a continuation-in-part of U.S. patent application Ser. No. 07/241,410, filed Sep. 7, 1988, now abandoned. This application is also a continuation-in-part of U.S. patent application Ser. No. 08/918,325, filed Aug. 26, 1997, now U.S. Pat. No. 5,985,348, which is a divisional of U.S. patent application Ser. No. 08/483,477, filed Jun. 7, 1995, now U.S. Pat. No. 5,698,244, which is a continuation-in-part of U.S. patent application Ser. No. 08/292,736, filed Aug. 18, 1994, now U.S. Pat. No. 5,656,319, which is a

Complaint, but they are on the list of the 18 patents (Exhibit 4).

IV. ARGUMENT

A. Nutrinova's Inequitable Conduct Pleading is Sufficient

Martek's Motion to dismiss Nutrinova's inequitable conduct pleading is unnecessary and without merit. Nutrinova did not merely plead "inequitable conduct," but specifically pled that:

> Martek prepared, filed and prosecuted [the 567] patent application . . . with material false data. The applicants knew that the [567 patent] application contained false data, but nevertheless filed, continued to prosecute, and convinced the Patent Office to issue the '567 patent based on such material false data.

This constitutes a sufficient pleading of inequitable conduct. The law is straightforward that knowing submission of false data in a patent application constitutes inequitable conduct. See *Hoffmann-La Roche, Inc. v. Promega Corp.*, 323 F.3d 1354 (Fed. Cir. 2003). Contrary to Martek's arguments, Nutrinova's specific pleading is not "vague or conclusory", and nothing in prior precedent requires that pleadings identify specific falsified data, describe why it is false or state why it was material.

Further, Martek incorrectly argues that the pleading is insufficient to enable Martek to prepare a proper response. First, Martek seems to be demanding a proffer of proof, which is not the function of a pleading. Second, in any event, Nutrinova further detailed that pleading to Martek by a separate letter which Nutrinova contemporaneously sent to Martek (the relevant

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divisional of U.S. patent application Ser. No. 07/911,760, filed Jul. 10, 1992, now U.S. Pat. No. 5,340,594, which is a divisional of U.S. patent application Ser. No. 07/580,778, filed Sep. 11, 1990, now U.S. Pat. No. 5,130,242, which is a continuation-in-part application of U.S. patent application Ser. No. 07/439,093, filed Nov. 17, 1989, now abandoned, which is a continuation-in-part of U.S. patent application Ser. No. 07/241,410, filed Sep. 7, 1988, now abandoned.

portion of which is Exhibit 1).

Martek's Motion should be rejected, or, in the alternative, Nutrinova can place the text of its contemporaneous letter to Martek in an amended pleading.

B. Nutrinova Properly Invoked the Declaratory Judgment Act

Martek argues that Nutrinova's Third Counterclaims should be dismissed because of a lack of an "actual controversy." Martek's arguments are without merit. The Declaratory Judgment Act, 28 U.S.C. §§ 2201(a) and 2202 is applicable here.

1. Martek Distorts Nutrinova's Pleading

Martek mistakenly alleges that "Nutrinova seeks a declaration that it does not infringe 'any valid and enforceable claim of any issued United States patent owned by Martek . . . .'" (Martek Br. at 7). Nutrinova's declaratory judgment counterclaim is not so open-ended. Nutrinova seeks a declaration only as to the one specific DHActive™ product made the one specific process that is the specific subject of Martek's Complaint. Contrary to Martek's argument, there is nothing "incredible" about a counterclaim that seeks to put finality as to the one product that is the subject of litigation.

2. Martek Has Already Sued Nutrinova on DHActive™

Martek's argument mis-portray the genesis of the declaratory judgment, and, thereby, distorts the law. All the cases cited by Martek involved a declaratory judgment plaintiff filing a lawsuit, generally where no concrete dispute had yet arisen between the parties. That is not the situation here. Martek has already sued Nutrinova for making DHActive™. The dispute between Martek's alleged rights and Nutrinova's DHActive product and process was already joined by Martek's lawsuit. Counterclaim Count III merely finishes the legal process begun by

Martek. If Martek has any other claims as to that specific product in litigation, Count III demands that Martek assert it in this action, and not by another lawsuit at some future time.

None of the authorities cited by Martek involved a declaratory judgment counterclaim by the defendant directed to the specific product already in litigation. Thus, the law cited by Martek is simply inapposite.

3. Count III Meets the Declaratory Judgment Standard

The Federal Circuit has held than an actual controversy exists upon showing of two elements: "First, the plaintiff must actually produce or be prepared to produce an infringing product. Second, the patentee's conduct must have created an objectionably reasonable apprehension on the part of the plaintiff that patentee will initiate suit if the activity in question continues." *EMC Corp. v. Norand Corp.*, 89 F.3d 807, 811 (Fed. Cir. 1996). Nutrinova meets both parts of this test.

First, Martek has already sued Nutrinova for commercializing DHActive™. Therefore, Martek necessarily concedes that Nutrinova meets the first "must actually produce or be prepared to produce an infringing product" requirement.

Second, the "objectionably reasonable apprehension" requirement is met, because Martek had previously asserted a total of nineteen patents against DHActive, threatened to sue, and then has actually sued DHActive on two patents.

When a lawsuit is already filed, the law assumes that the charged party does have an objectively reasonable apprehension of another lawsuit. Thus, in *Vanguard Research, Inc. v. PEAT, Inc.*, 304 F.3d 1249 (Fed. Cir. 2002), PEAT, the patent owner sued Vanguard in one action for trade secret mis-appropriation and breach of contract, and Vanguard responded by

filing a declaratory judgment action on a PEAT patent. The district court dismissed the declaratory judgment action because there was no justiciable controversy and as a matter of discretion. The Federal Circuit, however, reversed and remanded, holding:

> However, a patentee's present intentions do not control whether a case or controversy exists. The appropriate inquiry asks whether Vanguard had a reasonable apprehension that PEAT would sue it for patent infringement in the future. By filing the earlier lawsuit and informing Vanguard's clients that Vanguard is using the PEAT technology without a license, PEAT has shown "a willingness to protect that technology." Filing a lawsuit for patent infringement would be just another logical step in its quest to protect its technology.

See also *Goodyear Tire & Rubber Co. v. Releasomers, Inc.*, 824 F.2d 953, 955 (Fed. Cir. 1987), where the Federal Circuit, reversing the district court, held that by suing Goodyear in state court for trade secret misappropriation over the same technology, the patentee had "engaged in a course of conduct that shows a willingness to protect that technology" permitting declaratory judgment jurisdiction. Indeed, any lawsuits by a patentee, even against other parties and other products, manifest threatened litigation that justifies a declaratory judgment action.[3]

Even if Martek had not already sued Nutrinova, Martek's written assertions to Nutrinova constitute a basis for a declaratory judgement action. Martek's conduct here is indistinguishable from the case of *Dainippon Screen Manufacturing Co. v. CFMT, Inc.*, 142 F.3d 1266 (Fed. Cir. 1998). There, the patentee had left a voice mail saying:

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[3] *See DuPont Merck Pharmaceutical Co. v. Bristol-Myers Squibb Co.*, 62 F.3d 1397, 1401 (Fed. Cir. 1995) (finding that plaintiff had reasonable apprehension of being sued where, *inter alia*, defendant had previously sued other generic drug companies attempting to produce the same drug); *Shell Oil Co. v. Amoco Corp.*, 970 F.2d 885, 888 (Fed. Cir. 1992) ("Related litigation may be evidence of a reasonable apprehension . . . ."); *Arrowhead Indus. Water, Inc. v. Ecolochem, Inc.*, 846 F.2d 731, 737 (Fed. Cir. 1988) ("Ecolochem's Arkansas suit evidenced not only an intent but a willingness and capacity to employ litigation in pursuit of its patent rights."); *Millipore Corp. v. University Patents, Inc.*, 682 F. Supp. 227, 232 (D. Del. 1987) (prior suits against three competitors justifies a reasonable apprehension of suit); *Dupont Dow Elastomers, L.L.C. v. Greene Tweed of Delaware, Inc.*, 148 F. Supp. 2d 412, 415 (D. Del. 2001).

> "We believe that we've got good, strong, multiple patents in this field. I have been told that [Dainippon] has known about them for years. We are a well-funded/capitalized company and we intend to protect our rights. . . . We do not think your client should be proceeding unilaterally to show at this show and if they do of course we're going to have to consider how we will handle that. We will not be afraid to protect our rights."

The Federal Circuit affirmed jurisdiction, holding that the voice mail:

> . . . . leads to the conclusion that defendants made substantial threats which created in Dainippon a reasonable apprehension that it would be sued for infringement.

The above voice-mail cited by the Federal Circuit as a basis for a declaratory judgment action is functionally identical to the written communications from Martek to Nutrinova:

> We continue to be concerned about how it is possible to produce . . . DHActive without infringing on one or more claims in Martek's patent portfolio. . . . . Martek may have no alternative but to actively assert its patent rights. As requested, we are providing you with a list of patents that we believe are relevant to this discussion. . . . . Of course, your product and process may also infringe other Martek patents.

(Exhibit 4).

Thus, Nutrinova has an objectively reasonable apprehension that Martek would sue Nutrinova under other patents or alleged rights in relation to DHActive, and the declaratory judgment action is proper.

4. **Martek Has Not Disclaimed Further Lawsuits Against DHActive**

In cases such as this, where the patent owner has created a reasonable apprehension of future lawsuits, the Federal Circuit has consistently required that the patentee disclaim on the record any future assertions of patent infringement to avoid a declaratory judgment. *Amana Refrigeration, Inc. v. Quadlux, Inc.*, 172 F.3d 852, 50 U.S.P.Q.2D (BNA) 1304 (Fed.Cir. April 5, 1999); *Super Sack Mfg. Corp. v. Chase Packaging Corp.*, 57 F.3d 1054, 1060 (Fed. Cir. 1995). Martek has not stated on the record that it would not assert other of its

patents against the DHActive product here in suit, and therefore, the declaratory judgment action should properly go forward.

5. **Justice and Efficiency Considerations Encourage the Declaratory Action**

Martek finally argues that the Court should exercise discretion to decline declaratory judgment jurisdiction. To the contrary, there is only one product and one process in issue. It may be presumed that Martek has already determined that only two of its patents are likely applicable to that one product made by one process, and has already asserted the only relevant patents. Martek can avoid a declaratory judgment as to the other patents by simply stipulating, as the Federal Circuit has required, that the other Martek patents are not infringed by Nutrinova's DHActive.

On the other hand, if Martek opts to maintain a right to assert any of its other patents, then justice, efficiency and fair play require that Martek assert all its patent claims in one action. The Court and Nutrinova should not be subjected to multiple patent litigations between the same parties involving the same product. It makes no sense to have the Court and multiple juries review the identical technology and virtually the same patents in multiple actions, rather than having all the claims of all the patents decided in one action.

V. CONCLUSION

Based on the foregoing analysis of fact and law, Defendants respectfully request that Plaintiff's Motions be denied.

Respectfully submitted,

Dated: December 29, 2003

George Pazuniak (#478)
Oleh V. Bilynsky (#3604)
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1007 North Orange Street
Wilmington, DE 19801
Tel: 302 658 9141
Fax: 302 658 5614
Attorneys for Defendants and Counterclaim Plaintiffs
Nutrinova Inc. and Nutrinova Nutrition Specialties and Food Ingredients GmbH

CERTIFICATE OF SERVICE

I, George Pazuniak, hereby certify that on the 29th day of December, 2003, I caused true and correct copies of the foregoing to be served upon the persons indicated below in the manner so indicated:

Hand Delivery
Steven J. Balick, Esq.
John G. Day, Esq.
ASHBY & GEDDES
222 Delaware Avenue
Wilmington, DE 19801

Regular Mail
Samuel B. Adams, Esq.
Gidon D. Stern, Esq.
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George Pazuniak

nutrinova

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Martek Biosciences Corporation
Attn. Dr. Jim Flatt
Sr. Vice President, Research & Development
6480 Dobbin Road
Columbia, MD 21045

USA

Management Board

Nutrinova
Nutrition Specialties & Food Ingredients GmbH
Industriepark Höchst
D-65926 Frankfurt am Main

Date: 24.10.2003
From: Dr. Arthur Steinmetz
Phone: +49 (0)69 305 - 2692
Fax: +49 (0)69 305 - 80794
E-Mail: steinmetz@nutrinova.com

Dear Dr. Flatt,

We wrote to you on August 11 and again on September 4, 2003. In those letters, we explained in good faith why Nutrinova did not infringe any of the nineteen Martek patents that you had asserted against us, and offered to meet with you at Martek's offices to further discuss individual patents and why Nutrinova had not done anything wrong.

Thus, we were unpleasantly surprised to discover that, rather than meeting and discussing the issues, Martek sued Nutrinova for patent infringement. We were even more shocked to learn that Martek did not even have the courtesy to inform us that Martek had filed a public lawsuit against us, asserting that one of our main products infringes your patents, but waited over three weeks to serve the Complaint on us. In the meantime, we have learned, Martek was advising our potential customers that Martek had sued us. You obviously understand the business consequences of such a lawsuit, particularly at this sensitive time, and, hence your failure to properly advise us of your lawsuit while not responding to our offer is difficult to comprehend.

Despite this, we would still prefer that both parties avoid the significant cost of litigation that a patent infringement suit imposes, and, therefore, we will in good faith explain in detail why Martek's allegation that Nutrinova infringes U.S. Patents 6,451,567 and 6,607,900 is not correct.

I. The U.S. Patent No. 6,451,567 Claims Are Manifestly Invalid and Unenforceable

As we had previously advised you, U.S. Patent No. 6,451,567 is both invalid and unenforceable for multiple and alternative reasons, which we now explain.

A. The Claims are Invalid for Indefiniteness

Claim 1 of U.S. Patent No. 6,451,567 ("567 patent") is as follows:

A process for producing lipids comprising:

Celanese
Nutrinova
A Business of Celanese AG

OCT-24-2003

nutrinova

D. <u>The 567 Patent Claims are Unenforceable</u>

We would prefer to avoid pointing out to patent owners that their patents are unenforceable for misconduct in the prosecution of their patents. However, in light of your lawsuit against us, we have no choice but to do so.

The Martek 567 patent includes clearly and admittedly false data. During prosecution of one of the priority applications to the 567 patent, Ser. No. 07/580,778 filed on September 11, 1990, Martek advised the Patent Office that certain data in that application was wrong, and sought to change it. Martek even filed a declaration by inventor Barclay to support correction of those errors. The Patent Office Examiner who was then considering the application did not permit Martek to correct the errors, because such corrections would have constituted "new matter."

Surprisingly, however, Martek later filed the application that issued as the 567 patent, that contains the very same erroneous data that Martek and the inventor had admitted was wrong and never obtained. Martek and its inventor knew that they had filed an application and signed an oath to an application that contained false data. This constitutes a basis for holding the patent unenforceable for inequitable conduct. See *Hoffmann-La Roche, Inc. v. Promega Corp.*, 323 F.3d 1354 (Fed. Cir. 2003), in which the Federal Circuit held that inclusion of a "prophetic" example in a patent application written in a past tense is a material misrepresentation. Martek's conduct is exactly the same – its patent application contains examples which do not represent actual data, and they are written in the past tense. The *Hoffmann-La Roche, Inc. v. Promega Corp.* case is indistinguishable.

In conclusion, it is apparent that the 567 patent is not valid or enforceable. We do understand the presumption or regularity of issued patents. But the 567 patent was issued by a single patent examiner, and examiners are often overworked and make mistakes. The decision of this examiner, like the decisions of any other individual, can be wrong. Indeed, a very large percentage of patents which had been granted by the Patent Office are held invalid by juries and courts, because that single examiner had erred – just see the cases we had cited above. Also attached is an article from the Harvard Law Review that provides statistical detail demonstrating that far too many patents are issued by the patent Office, which are subsequently held invalid. This unfortunately is just another such case of an erroneously-issued patent.

II. <u>U.S. Patent No. 6,607,900</u>

We now turn to the second patent upon which Martek has alleged to be infringed in its lawsuit, U.S. Patent No. 6,607,900 ("the 900 patent"). This 900 patent claims a particular process for producing lipids containing polyenoic fatty acids from a microorganism of the order *Thraustochytriales*. The 900 patent states on its face that the first application relating to the patent was filed on January 28, 2000, and, therefore, anything that was published before January 28, 1999 is prior art in the public domain, and cannot be patented by Martek.

As Martek well knows, many processes for producing such lipids were utilized by the industry prior to the January 28, 2000 priority date of the 900 patent. Thus, the 900 patent cannot cover what was already known and used in the industry prior to Martek's January 28, 2000 filing date.

Moreover, Nutrinova's process does not infringe any claims of the '900 patent. For example:

- Nutrinova does not infringe any claims that require a biomass density of at least 100g/ liter. Nutrinova obtains a biomass density that is significantly lower.

Celanese

Nutrinova
A business of Celanese AG

- Nutrinova does not employ separate "biomass increasing" and "production" stages.

- Nutrinova does not control its oxygen saturation levels or dissolved oxygen dosing during fermentation, but rather uses a constant aeration rate throughout the process. Nutrinova employs a single-stage fermentation process and does not utilize two separate stages involving separate control and manipulation of the oxygen content.

- Indeed, as mentioned before, Nutrinova obtains a biomass density less than 100g/l, and at the same time employs an initial glucose concentration of >100g/l, while the aeration rate is held as constant as possible. Additional glucose is not added during the fermentation over and above this initial charge. By using a > 100g/l initial glucose concentration, after a period of several days, the glucose has been completely exhausted. If more glucose were added during the fermentation, the rate of specific biomass increase would actually slow down. As such, Nutrinova does not employ "a rate sufficient to increase the biomass density of said fermentation medium to at least about 100 g dry cell weight per liter" as claimed by the 900 patent.

Having explained our position, Nutrinova remains committed to amicably resolving all issues with Martek, and we renew our offer to conduct an in-person meeting with you. This lawsuit is not good for either party. Continuation of the lawsuit will cause Nutrinova to expend money and resources on the litigation, and Nutrinova will seek attorney fees and costs from Martek. If the lawsuit inhibits further investment in Nutrinova or ability to sell Nutrinova to a potential buyer, we will be forced to seek compensation for such harms from Martek also. From Martek's viewpoint, Martek's lawsuit may negatively impact Martek's entire patent portfolio and valuation, upon establishing the non-infringement, invalidity and unenforceability of the Martek patents. In short, there appears to be at least short-range damage to Nutrinova and long-term damage to Martek if this matter proceeds, and it makes sense that we attempt to resolve this matter as soon as possible before further damage is done.

In the meantime, Nutrinova is answering your lawsuit to protect its technology, and our attorneys will provide the filed papers to your attorneys. Absent resolution of this matter, we will persevere in our defense of our technology and right to fairly and properly compete.

With best regards,

Arthur Brennan
President & CEO Nutrinova

EXHIBIT 2

From Jim Flatt [mailto:jflatt@martekbio.com]

Sent: 27. May 2003 17:22

To: Arthur Steinmetz

Cc: George Barker; Bill Barclay

Subject: DHActive Commercialization Follow-up and Concerns

Dear Dr. Steinmetz,

Greetings. It has been several months since our two companies have spoken.

We have been monitoring the market situation and, based on claims contained in prior and recently issued patents, remain very concerned about the possibility of Nutrinova's commercialization of DHActive in the United States.

Bill Barclay and I would like to discuss this situation with you at a time convenient for you this week or next (week of 2 June). Is there a convenient time when we may call you, and at what number should we contact you? Please let me know at your convenience. I can be reached as follows:

Phone: 1-443-542-2159
Cell: 1-303-808-0091
Email: jflatt@martekbio.com

Thank you very much

Kind regards,

Jim Flatt

Sr. Vice President, Research & Development
Martek Biosciences

EXHIBIT 3

From: Steinmetz Arthur, Nutrinova [mailto:steinmetz@NUTRINOVA.COM]

Sent: Friday, June 06, 2003 3:06 AM

To: Jim Flatt'

Cc: Mueller, Stephanie, Nutrinova; Kiy, Thomas, Nutrinova; Rymon Lipinski,Prof.,Nutrinova; Hausmanns, Stephan, Nutrinova

Subject: DHActive Commercialization Follow-up and Concerns

Dear Dr. Flatt,

We are certainly interested to understand your position better. To learn more about potential conflicts, we kindly ask you to provide us with detailed information regarding the patents and respective claims you have in mind. Please be also more specific about your below mentioned concerns.

Please send such information to my attention and we will review it carefully and come back to you in due course.

With best regards,

Arthur Steinmetz

EXHIBIT 4

From: Jim Flatt [SMTP:jflatt@martekbio.com]

Sent: Mittwoch, 18. Juni 2003 23:50

To: Steinmetz Arthur, Nutrinova

Cc: Mike Tompkins; George Barker; Bill Barclay; Hausmanns, Stephan, Nutrinova; Rymon Lipinski,Prof.,Nutrinova; Kiy, Thomas, Nutrinova; Mueller, Stephanie, Nutrinova

Subject: RE: DHActive Commercialization Follow-up and Concerns

Dear Dr. Steinmetz,

Thank you for your reply.

We continue to be concerned about how it is possible to produce a DHA-rich oil with a composition similar to that reported for DHActive without infringing on one or more claims in Martek's patent portfolio. We would very much like to see this matter settled amicably. However, in the absence of any additional information which would persuade us to act otherwise, Martek may have no alternative but to actively assert its patent rights.

As requested, we are providing you with a list of patents that we believe are relevant to this discussion. Of Martek's over 150 issued patents (and over 250 pending applications), we have selected 18 relevant Martek issued US patents (list attached). Of course, your product and process may also infringe other Martek patents. Please note that we have a number of pending applications that will also be relevant when issued, including a number of allowed, but not yet issued, applications. We may forward copies of additional relevant patents to you when they issue.

We would like to receive your comments and view of the situation within 45 days of receipt of this list.

Please let us know if you agree with this approach. If you would like to discuss this situation further, please contact either George Barker, SVP and General Counsel of Martek, (443) 542-2124 or myself (443) 542-2159.

Best regards,

Jim Flatt

Martek Biosciences

<<Table of Martek US Patents affecting Nutrinova FTO (0603).doc>>

MARTEK PATENTS THAT MAY AFFECT CELANESE/NUTRINOVA/PROTOS FREEDOM TO OPERATE IN THE U.S. WITH RESPECT TO DHACTIVE

U.S. Patent No.
5,130,242
5,340,594
5,340,742
5,374,657
5,518,918
5,550,156
5,656,319
5,688,500
5,698,244
5,908,622
5,985,348
6,054,147
6,103,225
6,177,108
6,410,281
6,451,567
6,566,123
6,568,351

nutrinova

Nutrinova · Industriepark Höchst · D-65926 Frankfurt am Main

By fax and letter

Martek Bioscience
Mr. Jim Flatt
6480 Dobbin Road
Columbia, MD 21045

USA

Management	Nutrinova Nutrition Specialties & Food Ingredients GmbH Industriepark Höchst D-65926 Frankfurt am Main	Date: August 1, 2002 From: Dr. Arthur Stammer Telefon: +49 (0)69 305 – 15663 Telefax: +49 (0)69 305 – 81892 E-Mail: [illegible]@nutrinova.com

DHActive Commercialization Follow up and Concerns

Dear Mr. Flatt,

Thank you for your clarification regarding Martek's patent portfolio. We have carefully reviewed the eighteen patents identified in your e-mail, but we do not believe that they are material to any activity contemplated by Nutrinova.

Nutrinova respects Martek's development of *Thraustochytrium* and *Schizochytrium* derived oils for specific applications, and we recognize and respect Martek's product offerings and patent coverage in these areas. Nutrinova has no intention of making, using, selling or offering for sale any such products. To the end, Nutrinova has spent significant resources and effort to develop its own production technology that is not within the scope of Martek's patents. We are developing DHA products outside the patent portfolio of Martek (and including Omega oils). Our product applications include uses that are not covered by any Martek patent, and would be very beneficial throughout the world. These applications include the use of DHA oils for prophylactic and therapeutic medical uses as well as certain applications in the nutrition arena, such as applications for adults and the elderly such as capsules, beverages, bakery products, cereals, food supplements and the like.

The patents identified in your June 18 e-mail are generally in one of three groups. Patents 5,130,242, 5,340,594, 5,340,742, 5,518,918, 5,688,500, 5,908,622, 6,103,225 only include claims which are limited to materials derived from *Thraustochytrium* and/or *Schizochytrium*. Since Nutrinova employs a production organism being member of a different genus as the source for all its products, it is straightforward that we not infringe those claims.

Patents 5,374,657, 5,550,156, 5,656,319, 5,688,500, 5,698,244, 5,985,348, 6,054,147, 6,103,225, 6,177,108, 6,261,251 are not material, because Nutrinova does not practice and does not intend to practice the specific applications to which the claims of these patents are limited.

Patents 5,340,742, 5,518,918, 6,410,281, 6,566,123 are not impacted by Nutrinova's activities, *inter alia*, because none of Nutrinova's media compositions employ a non-chloride sodium salt, by which

Celanese

the claims of each of these patents is limited, and which was highly discussed in the prosecution histories of the patents as being crucial.

Finally it is unclear to us how U.S. Patent No. 6,451,567, as well as some of the other patents listed above, can not be invalid or unenforceable, given publications more than one year before the earliest priority date of the patents. The publications were never presented to the Patent Office and were never considered. Thus, while we fully respect Martek's patents generally, we cannot agree not to compete or provide better products for the industry where the patents were not legally issued.

In case further clarification is required, we would be happy to discuss these matters in more detail and in person, and we offer our offices in New Jersey where we could meet you together with our US colleagues for perhaps a ½ day meeting. Alternately, we can meet at your offices in Columbia. We can either invite our respective counsel to the meeting, or not, and we leave that to you.

Sincerely yours,

Nutrinova
Nutrition Specialties &
Food Ingredients GmbH

Arthur Steinmetz
(CEO)

Thomas Rhy
(Director Protos)

cc: Dr. Eckart von Haefen
Dr. Stephan Hansmann
Stephen Müller